

RECEIVED

MAR 19 2003

TECH CENTER 1600/2900



ENTERED

1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003

TIME: 13:55:21

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03132003\I810764A.raw

```

5 <110> APPLICANT: Ristic, Zoran
7      Bhadula, Shailendra
9      Yang, Genping
11     Elthon, Thomas
13     Habben, Jeffery
17 <120> TITLE OF INVENTION: Maize Chloroplast Protein Synthesis Elongation Factors and
Methods of Use
18     for Same
22 <130> FILE REFERENCE: P03965US1
26 <140> CURRENT APPLICATION NUMBER: 09/810,764A
28 <141> CURRENT FILING DATE: 2001-03-16
32 <150> PRIOR APPLICATION NUMBER: 60/190,175
34 <151> PRIOR FILING DATE: 2000-03-17
38 <150> PRIOR APPLICATION NUMBER: 60/203,204
40 <151> PRIOR FILING DATE: 2000-05-11
44 <160> NUMBER OF SEQ ID NOS: 6
48 <170> SOFTWARE: PatentIn version 3.1
52 <210> SEQ ID NO: 1
54 <211> LENGTH: 20
56 <212> TYPE: PRT
58 <213> ORGANISM: Zea mays
62 <220> FEATURE:
64 <221> NAME/KEY: MISC_FEATURE
66 <222> LOCATION: (2)..(2)
68 <223> OTHER INFORMATION: X is any amino acid
72 <220> FEATURE:
74 <221> NAME/KEY: MISC_FEATURE
76 <222> LOCATION: (16)..(16)
78 <223> OTHER INFORMATION: X is any amino acid
82 <400> SEQUENCE: 1
W--> 84 Ala Xaa Asn Lys Phe Glu Arg Leu Lys Pro His Val Asn Ile Gly Xaa
      85 1          5          10          15
      88 Ile Gly His Val
      89          20
      92 <210> SEQ ID NO: 2
      94 <211> LENGTH: 20
      96 <212> TYPE: PRT
      98 <213> ORGANISM: Zea mays
      102 <400> SEQUENCE: 2
      104 Ala Val Lys Val Thr Ile Asn Gly Phe Gly Arg Ile Gly Thr Asn Phe
      105 1          5          10          15
      108 Leu Thr Glu Ala
      109          20
      112 <210> SEQ ID NO: 3

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003

TIME: 13:55:21

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03132003\I810764A.raw

```

114 <211> LENGTH: 12
116 <212> TYPE: PRT
118 <213> ORGANISM: Zea mays
122 <220> FEATURE:
124 <221> NAME/KEY: MISC_FEATURE
126 <222> LOCATION: (9)..(9)
128 <223> OTHER INFORMATION: X is any amino acid
132 <400> SEQUENCE: 3
W--> 134 Val Val Ala Trp Tyr Asp Asn Glu Xaa Gly Tyr Ser
135 1 5 10
138 <210> SEQ ID NO: 4
140 <211> LENGTH: 20
142 <212> TYPE: PRT
144 <213> ORGANISM: Zea mays
148 <220> FEATURE:
150 <221> NAME/KEY: MISC_FEATURE
152 <222> LOCATION: (18)..(18)
154 <223> OTHER INFORMATION: X is any amino acid
158 <400> SEQUENCE: 4
160 Ala Arg Gly Lys Phe Glu Arg Thr Lys Pro His Val Asn Ile Gly Thr
161 1 5 10 15
W--> 164 Ile Xaa His Val
165 20
168 <210> SEQ ID NO: 5
170 <211> LENGTH: 19
172 <212> TYPE: PRT
174 <213> ORGANISM: Zea mays
178 <220> FEATURE:
180 <221> NAME/KEY: MISC_FEATURE
182 <222> LOCATION: (17)..(17)
184 <223> OTHER INFORMATION: X can be any amino acid
188 <220> FEATURE:
190 <221> NAME/KEY: MISC_FEATURE
192 <222> LOCATION: (18)..(18)
194 <223> OTHER INFORMATION: X can be any amino acid
198 <400> SEQUENCE: 5
200 Arg Gly Lys Phe Glu Arg Thr Lys Pro Gly Val Asn Ile Gly Thr Ile
201 1 5 10 15
W--> 204 Xaa Xaa Val
208 <210> SEQ ID NO: 6
210 <211> LENGTH: 1681
212 <212> TYPE: DNA
214 <213> ORGANISM: Zea mays
218 <400> SEQUENCE: 6
219 attcccaaat aatccccacc tcccgctgct gctccgccgc ccgccatggc ctccctcacc 60
221 tcggcggtcca cttcactcct cttccgcgag gcctcctcat ccaggagccg catccgtctc 120
223 tccaccccccc tgggcttctc cgcgcgagcct gcgcgggtgc ggagccaggg ggcggcagtg 180
225 ggcgcgcggc ggcgcggggc cctgctggtg gtgcgcgcgg cgaggggcaa gttcgagcgc 240
227 accaaaccac acgtcaacat aggcaccatc ggccatgtcg accacggaaa gaccactctc 300

```

## RAW SEQUENCE LISTING

DATE: 03/13/2003

PATENT APPLICATION: US/09/810,764A

TIME: 13:55:21

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03132003\I810764A.raw

229	accgccgcgc	tcacccatggt	gctcgccctcc	gtcgggtggca	gcgcgcctaa	gaagtacgac	360
231	gagatcgacg	ccgcccccca	ggagcgcgcc	cgcggtatca	ccatcaacac	cgccaccgtc	420
233	gagtacgaga	ccgagaccgc	ccactacgca	cacgtcgact	gccccggcca	cgccgactat	480
235	gtcaagaata	tgatcaccgg	cgctgcgcag	atggacgggtg	ccatcctcgt	cgtatccggt	540
237	gccgacgggc	ccatgccgca	gaccaaagag	cacatccctcc	tcgccaagca	agtcgggtgtt	600
239	cccaagatcg	ttgtcttctt	caacaagaag	gacatgggtcg	acgacgagga	gctgctcgag	660
241	ctcgtcgagc	tcgaggtccg	cgagctgctc	agcaactacg	agtagcgacg	cgacgacgta	720
243	ccaatcgctg	ctggtctccg	cctcaaggcg	ctcgaggctc	tcattggtcaa	ccctgccttg	780
245	aagcgcgcg	acgatgagtg	ggtcgactac	atcttctcgt	tggttgataa	agtggattcc	840
247	tatattccag	tcccgagag	gcgactgac	ctcccgttct	tgctcgctgt	tgaagatgtc	900
249	ttctccatca	ccggtcgtgg	tacagttgcc	actggccgta	tagagcgtgg	caccgtcaag	960
251	attggtgaca	cagtcgatat	cgtcggaatc	cgggacaccc	ggaactgcac	ggtcactggt	1020
253	gttgagatgt	tccagaagac	catggatgat	gccatggccg	gagacaatgt	tgggctgctg	1080
255	ctccgtggta	tgagaagga	tgacattgaa	agaggcatgg	tgctggcaaa	gcctggctct	1140
257	atcacaccgc	acaccaagtt	tgaggctggt	gtgtatgtgc	ttaagaagga	agaggggtggc	1200
259	cgacactcac	ctttcttccc	tggttaccgc	ccacagttct	acatgcggac	aactgatgtg	1260
261	acagggagtg	tgactacgat	tatgaatgac	aaggatgagg	aggcgaagat	gtgcatgcct	1320
263	ggtgaccgta	tcaaaatgat	tgttcagctc	atccagcctg	ttgcttgatga	gcaggggatg	1380
265	aggtttgcta	tccgtgaggg	tggttaagacc	gttgggtgcc	gtgtcatcaa	caaaatcatt	1440
267	gagtaaactg	gatataacat	atccaccatg	agaattttcc	ttgtttactc	aaagcgacat	1500
269	gctccgtagt	tggttattatg	tggtgagttt	taggggttgc	tcattgtgcaa	ttgtagtagt	1560
271	acactttttt	tttgtcaagt	gaattttgcat	aatttatgac	attcacgaca	aagattcaca	1620
273	tatctggttg	caactcattt	ggctaagagg	tgccatctac	tgttaaaaaa	aaaaaaaaaa	1680
275	a						1681

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003  
TIME: 13:55:22

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF4\03132003\I810764A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,16  
Seq#:3; Xaa Pos. 9  
Seq#:4; Xaa Pos. 18  
Seq#:5; Xaa Pos. 17,18

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 17

## VERIFICATION SUMMARY

DATE: 03/13/2003

PATENT APPLICATION: US/09/810,764A

TIME: 13:55:22

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03132003\I810764A.raw

L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16